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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,788	05/22/2001	Shawn R. Gettemy	PALM-3653	2343

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EXAMINER

KUMAR, SRILAKSHMI K

ART UNIT	PAPER NUMBER
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2675

10

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/863,788

Applicant(s)

GETTEMY, SHAWN R.

Examiner

Srilakshmi K. Kumar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following office action is in response to Amendment B, filed February 9, 2004. Pending claims are 1-20. Claims 1, 10 and 16 have been amended.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on December 4, 2002 has been considered, but the copy of the IDS form (PTO-1449) has been misplaced. Examiner requests a copy of the IDS form (PTO-1449).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Francis et al (US 6,181,842) in view of Beatty et al. (US. 5,233,502).

As to independent claims 1, 10 and 16, Francis et al disclose a touch screen display for a personal information device (Fig. 1A), comprising; an optical touch sensor (Fig. 1A, items 18 and 19); a display; and a single piece device enclosure containing the optical touch sensor (Fig. 1A, item 10), the single piece device enclosure having a transparent surface (Fig. 1A item 10F) for viewing the display disposed beneath the transparent surface, the single piece device enclosure encasing the personal information device including a lens structure for columnating light across the transparent surface (col. 5, lines 44-col. 6, line 11), the optical touch sensor coupled to the lens structure to register contact with the transparent surface via the lens structure

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while the single piece device enclosure prevents contaminants from entering the personal information device (col. 5, line 44-col. 6, line 40); and wherein the optical sensor can be activated by touching the external surface of the single piece device enclosure to disturb light received by the lens structure (col. 5, line 44-col. 6, line 40). Where Francis et al do not explicitly show a single piece device enclosure, Beatty et al discloses a single piece touch sensitive device enclosure in Fig. 1, item 3. It would have been obvious to one of ordinary skill in the art to incorporate the single piece device enclosure of Beatty et al into that of Francis et al as the single piece enclosure is advantageous as it would be more resilient to wear and tear.

As to dependent claims 5 and 12, limitations of claims 1 and 10, and further comprising, wherein the optical touch sensor detects and registers contact from a finger on the transparent surface. Francis et al do not disclose wherein the optical sensor detects and registers contact from a finger. It would have been obvious to one of ordinary skill in the art that the system of Francis et al detects and registers contact from a finger as the system discloses a free space (10F) for user input.

As to dependent claim 2, limitations of claim 1, and further comprising, wherein the single piece device enclosure includes in mold decoration along a periphery of the single piece device enclosure (Figs. 1A & 1B).

As to dependent claim 3, limitations of claim 1, and further comprising, wherein the lens structure included within single piece device enclosure is coupled to the optical touch sensor to provide columnated light for detecting and registering contact with the transparent surface (col. 1, lines 32-36, col. 7, line 46-col. 8, line 31).

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As to dependent claim 4, limitations of claim 3, and further comprising, wherein a plurality of waveguides are coupled to the lens structure and embedded within the single piece device enclosure (Fig. 1A, col. 11, lines 42-59).

As to dependent claims 6 and 13, limitations of claims 1 and 10, and further comprising, wherein the optical touch sensor detects and registers contact from a stylus on the transparent surface. Francis et al do not disclose wherein the optical sensor detects and registers contact from a stylus. It would have been obvious to one of ordinary skill in the art that the system of Francis et al detects and registers contact from a stylus as the system discloses a free space (10F) for user input.

As to dependent claim 7, limitations of claim 1, and further comprising, wherein the single piece device enclosure comprises a mylar polycarbonate material. Although Francis et al do not disclose the material with which the single piece device enclosure comprises, it would have been obvious to one of ordinary skill in the art that the device enclosure could have been made with any material.

As to dependent claim 8, limitations of claim 1, and further comprising, wherein the piece device enclosure is bezel-less (Figs. 1A and 1B).

As to dependent claims 9 and 18, limitations of claims 1 and 16, and further comprising, wherein the transparent surface transmits more than 90 percent of light impinging upon the transparent surface to the display. Francis et al do not disclose where the transparent surface transmits more than 90 percent of light. It would have been obvious to one of ordinary skill in the art that the amount transmitted could have easily been 90 percent, as Francis et al do disclose in col. 5, lines 44-67, wherein the collimation of the send light in turns enhances the collimation

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of the light beams crossing the free space region. Thus, more of the light beam is transmitted and received.

As to dependent claim 11, limitations of claim 10, and further comprising, wherein the single piece device enclosure includes a transparent surface and the display mechanism is disposed beneath the transparent surface (col. 5, line 44-col. 6, line 40).

As to dependent claim 14, limitations of claim 10, wherein the single piece device enclosure includes a periphery area for in mold decoration (Figs. 1A & 1B).

As to dependent claim 15, limitations of claim 10, and further comprising, wherein the optical lens structure is disposed along a periphery of the transparent surface of the single piece device enclosure (Fig. 1A, col. 11, lines 42-59).

As to dependent claim 17, limitations of claim 16, and further comprising, wherein a waveguide structure couples the lens structure to the optical sensor (Fig. 1A, col. 11, lines 42-59).

As to dependent claim 19, limitations of claim 16, and further comprising, wherein the bezel-less transparent surface includes peripheral area for in mold decoration (Figs. 1A and 1B).

As to dependent claim 20, limitations of claim 16, and further comprising, wherein the lens structure is embedded within the transparent surface of the display assembly (Fig. 1A, col. 11, lines 42-59).

Response to Arguments

3. Applicant's arguments filed February 9, 2004 have been fully considered but they are not persuasive.

With respect to applicant's arguments in regards to where the combination of Francis et al and Beatty et al do not disclose where the touch display includes the single piece device enclosure encasing the personal information device, examiner disagrees. Francis et al disclose a single piece device enclosure containing the optical touch sensor (Fig. 1A, item 10), the single piece device enclosure having a transparent surface (Fig. 1A item 10F) for viewing the display disposed beneath the transparent surface, the single piece device enclosure encasing the personal information device including a lens structure for columnating light across the transparent surface (col. 5, lines 44-col. 6, line 11). Beatty et al discloses a single piece touch sensitive device enclosure in Fig. 1, item 3. In col. 3, lines 26-39, Beatty et al disclose where the display mounted in the closed housing configuration, the display/touch screen combination is visible and accessible. Also while in the display is in the second configuration, the display is viewable through the window and provides the entire user interface with its integral touch screen provides a means of information display and a means of data entry. Thus, the above rejection is maintained.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

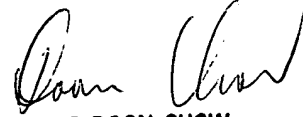
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srilakshmi K. Kumar whose telephone number is 703 306 5575. The examiner can normally be reached on 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, xxxx xxxx can be reached on xxx xxx xxxx. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305 4700.

Srilakshmi K. Kumar
Examiner
Art Unit 2675

SKK
May 2, 2004


DENNIS-DOON CHOW
PRIMARY EXAMINER